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hese are the times that try [our] souls." What was said in Revolutionary War times seems as apt today. Resources are shrinking. Our workforce is changing significantly with the departure of the baby boomers. The warfighter's needs are in great flux, creating instability in Department of Defense (DoD) and military Services requirements. The gulf between Congress and the Executive Branch continues to widen, causing inconsistent direction and uncoordinated oversight. Industry is changing how it works with DoD, adding to the turmoil. Defense acquisition, always a tough job, is getting tougher.

Is the defense acquirer's job in a "no-win" situation? It depends on our perspective.

If we approach the challenge purely as administrators of processes, who can only do what we are explicitly told to do, we are indeed in for an unrewarding, unfulfilling time.

If we approach the challenge as operators—committed to innovating and adapting tools and processes to support our goals, creating networks and coalitions that can enlarge our ability to advance our projects, striving to understand the chaotic operational environment of federal and defense acquisition, and leveraging opportunities that come from that understanding—we can achieve results beyond our most positive expectations.

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Becoming an acquisition operator—a "chaosmeister"—is not easy. But it is achievable. Each of us has, or can gain, the knowledge and experience to be an effective acquisition operator—if we adopt this "operational perspective."

The Acquisition Environment

The defense acquisition environment is chaotic. Multiple senior organizations and individuals—inside and outside government—have specific aims. Many focus on disparate goals that do little to achieve effective or efficient acquisition outcomes.

Let's look at some of the major factors.

Federal structure/constituency-created funding instability: The Constitution's separation of powers prevents "the man on horseback" from seizing all control. That separation has a price—it creates intricate "checks and balances" and slows action. Money takes two years to proceed from need identification to enactment of a budget. It takes longer if slowed by continuing resolutions. The annual DoD, presidential and congressional

reviews of funds, often driven by divergent interests, frequently lead to financial instability and acquisition inefficiency. Partisan gridlock has damaged the collaborative dynamic essential to productive government operations.

Requirements instability: The DoD's strategic vision, and the warfighting capabilities required to achieve it, are in great flux. The DoD must meld the inputs from the Executive Branch and Congress into a coherent program that meets future requirements, while sustaining the real-time needs of combat commanders—all this in the face of steadily decreasing resources and dynamically changing threats.

It is unsurprising that the dynamic tension has never been greater between "maintaining the status quo" and "addressing the new realities." This affects efforts across the entire acquisition cycle—from concept through fielding to sustainment and retirement.

Leadership changes also contribute to instability: A new presidential administration, a shift in congressional committee leadership, a new uniformed head

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of a Service—any of these can change requirements (and acquisition activities) significantly.

Technology "inefficiency": Science and technology (S&T) organizations, and acquisition organizations, have not been routinely and robustly linked. Any effective linkages have been due to the enterprise of individuals (technologists and acquirers) who have taken the initiative to seek out each other and work together. And the acquisition system, somewhat permeable at best to technologies proposed early in the prototyping phase, becomes virtually impermeable to these technologies once a prime contractor enters the picture.

Inherent Chaos

The defense acquisition environment includes hundreds of organizations, each overflowing with policies and processes that, unfortunately for the acquirer, are not uniformly designed to work well with each other. There are gaps in the process and policy interfaces between the organizations.

Each organization jealously guards its own priorities. In determining its activities, defense acquisition depends on inputs and guidance from organizations encompassing the key decision processes (i.e., requirements, resources, acquisition and technology). The divergences and disparities between organizations are dealt with by the acquirer.

Acquisition improvement initiatives created by any one organization will be limited in their enterprise-wide effectiveness by the span of the other organizations' authorities. For example, the multiple initiatives crafted by the DoD to streamline processes and improve acquisition efficiency are limited by the competing authorities of Congress, Service and DoD leaders in budgeting, requirements and technology development. One group's goal to "reduce redundancy" by eliminating a reporting requirement may be viewed in quite a different light by another stakeholder, who may insist that the requirement be retained.

Operations in Defense Acquisition

Defense acquisition inherently is an operational environment, and the acquirer is the key to it. This environment includes autonomous organizations conducting uncoordinated operations in the same space. Most of these operations tangibly affect other operators in the space. Each organization has known characteristics, processes, policies, goals and personnel. Each also has discernible attitudes toward the other organizations, including individual programs and acquisitions. This organization-specific information can be gathered and analyzed to provide situational awareness for the acquirer's use in establishing a "way ahead" (similar to how intelligence shapes warfighter operations in a tactical environment). Accordingly, the acquirer must assess his acquisition's unique environment and determine his or her tactical plan for optimizing program outcomes.

Train Acquirers as Operators

Acquirers must train as warfighters are trained—not only mastering necessary individual skills but also team skills and situational awareness (the ability to assess and exploit the chaotic environment to achieve their goals). So, how do operators train?

First, an operator works to achieve an operational (outcome-based) goal. For instance, a ballistic missile submarine crew's goal is to provide a strategic deterrent patrol with continuous and undetected availability of the ship's strategic weapons battery.

Do acquirers have a similar operational goal? One readily presents itself: to consistently deliver defined warfighting capability within allocated resources. ("Resources" here specifically refer to people, technology, funding, facilities and schedule.)

Now that we have an operational goal for acquisition, how do we develop the "acquisition operator"? For starters, take a



page out of the process for developing warfighter operators (the Navy process is depicted below):

- Train the warfighter to master an individual specialty (e.g., sonarman, machinist mate, etc.).
- Train the warfighter to be an effective member of various operational teams (e.g., watchstanding teams, damage control teams, etc.). Do this in parallel with individual training.
- Train the warfighter and these operational teams to use intelligence and/or situational awareness to proactively execute mission goals by intelligently adapting tactics as the warfighting environment changes—both to seize tactical advantage and to minimize operational risk.

How does this approach convey to "acquisition operations"? Let's look at our acquisition environment and our "Spheres of Control/Influence/Concern":

- What can I control that affects performance and outcomes?
- What can I *influence* (outside my sphere of control) that affects performance and/or outcomes?
- What am I concerned about in my environment (outside my spheres of control or influence) that affects performance and/or outcomes?
- How can I adapt my strategy and/or actions to take advantage of the opportunities and manage the risks identified in this environmental scan?

Mapping our environment along the above lines will reveal a practical approach to creating the acquisition operator.

First, optimize every acquirer's ability to contribute within his or her spheres of control or influence, both as an individual (career field and tools knowledge—the sphere of control) and as a team member (both in standing [e.g., program] and in functional [e.g., integrated product] teams—the sphere of influence). Finally, optimize each acquirer's ability to operate effectively by remaining "situationally aware" of the environment outside his or her spheres of control and/or

influence (the sphere of concern). We develop individual understanding and situational awareness that translate into agile, thoughtful exploitation of our "real world" and enables improved acquisition outcomes.

Historically, Defense Acquisition Workforce development has centered on the individual acquirer, focusing on his or her career field. The other two "operational aspects" of defense acquirer development have received comparatively little formal emphasis.

Team training has been an adjunct to Defense Acquisition Workforce Improvement Act and executive courses—training cohorts using students from across the workforce, as opposed to intact teams such as those that operate together routinely. This began to change over the last few years as intact teams, from both government and industry, are brought together in Acquisition Program Transition Workshops to deal with real issues and collaboratively define strategic and tactical plans. Intact government acquisition teams also are brought together in the Services Acquisition Workshop and, from their actual data, develop practical products team members can use in the workplace.

Situational awareness of the acquisition environment, when discussed, usually is the province of the more advanced 300-level and executive courses. Individual development of this talent usually depends on whether a person connects with a mentor (senior or more experienced peer) who takes the time to convey that tacit knowledge and experience to the mentee. This does not always occur.

"Chaosmeistering" Behaviors and Skills

We've talked about the basic theory of the acquisition operator (the "chaosmeister"). What behaviors and/or skills should a "chaosmeister" demonstrate?

Create a strong alliance with your boss and keep him or her informed. Your relationship and communication with your boss

is absolutely essential to effective "chaosmeistering." A strong relationship will provide both valuable "top cover" as you proceed—and a senior partner in strategizing how to create and conduct your campaign. Your boss can then create additional "top cover" by keeping the chain of command informed and involved. Finally, real-time communication with your boss is a key to retaining this essential support—particularly if problems or issues arise.

Stop agonizing—start doing! It's harder to be run over if you're moving. It is easy to be daunted into immobility in today's acquisition environment. There are many stakeholders, customers and partners, and they all seem to urgently want something different from the acquirer (often simultaneously). Combine that with the phalanx of "checkers" who will not let you pass until they are given precisely what they want, and the "reactive crouch" can become the acquirer's default position.

It is much better to determine your scope of authority and energetically move your program forward within your scope of control. Programs typically suffer more from lack of decisions than from erroneous decisions. Very few decisions are made that cannot later be "course corrected" to take into account change or new data. Programs not making strong progress stand out when DoD leaders face resource cuts. The only irreparable decision is to remain at "all stop": The "loss of opportunity" can be staggering. As long as your immediate leadership understands where you are going and is kept informed as you proceed, you'll be in good shape with this approach.

There is no "unified field theory" for defense acquisition. There is something really comforting about a good old-fashioned detailed process or checklist. It provides a sense of completeness and security: "All I have to do is execute this and everything will turn out all right." What a shame this is not an acquirer's reality! Working within defense acquisition is much more like a war game than a checklist.

The DoD includes hundreds of processes and policies. They work well in isolation. Some even work well with other processes. None works perfectly with all the other processes. Acquirers (individually and in teams) are the bridges that join these processes. You need to know the art of the deal and to collaborate, partner and tailor processes intelligently to make them work for a specific situation. It really is up to you.

Build alliances. There is strength in the (right) numbers. The warfighter always has striven to create and operate within alliances. The reasons are obvious: More people working toward the same end provide greater resources, a richer strategic and tactical "brain trust" and added situational awareness. The same principle holds true in acquisition. The acquisition environment has myriad organizations, each working toward its own specific goals. Other organizations can become your allies

and align with you if you can convince them that your goals and their goals are mutually supportive.

Develop your own "situational awareness" network. Share the information with your allies. Military intelligence always has been essential to warfighter success. Without intelligence, operations are blinded, with potentially disastrous results. The churn of federal acquisition requires the same type of upfront information—"situational awareness."

Acquirers often tend to stick to acquisition-specific processes and tasks, trusting that people outside their immediate organizations will provide good situational awareness information in time for it to be acted upon. Unfortunately, this doesn't always happen. Due to the volume of activity in federal acquisition, and the reduced acquisition staffing at Services levels and in the Office of the Secretary of Defense (OSD), this information may arrive late or not at all, creating reactive situations with few good choices.

What can you do? Create your own "situational awareness" network. First, you can personally scan various information sources to understand events that may affect the DoD, your Service and your acquisition—and get the word out to your organization. To share this information, your "situational awareness" network can include your allies across the broader acquisition environment. One of the best ways is to pass on information that you know a network member will find useful—even if it has no benefit to you. This allows us to realize an additional objective: Treat your partners as you want to be treated by them (the acquisition "golden rule"). That network member will remember your "good deed" and reciprocate—sometimes providing key information at critical junctures.

Don't be afraid to "get out of the box." The fact that you are unconventional doesn't by itself mean you're not right!

Acquirers are like all people: They gravitate toward "positions of comfort" and traditional execution paths. This can work in a stable operating environment. It can lead to failure in today's dynamically changing environment. Operational chaos often demands departures from the "positions of comfort" in acquisition to find the "ways that work." These departures will disturb the "status quo" in your organization, but don't hesitate to propose the changes needed for success. Opportunity for change is time sensitive; opportunity windows tend to close rapidly. So we, as acquisition operators, must seize them while they exist!

Understand the "players" and their motivations. We cannot foretell detailed outcomes in the multiplayer acquisition environment. We can, however, discern the motivations and goals of the major players and their positions regarding our organization's programs by observing their actions. We can use that information to help determine our strategy and tactics and create a viable "way ahead." This situational awareness

can be parlayed into campaign plans that leverage acquisition environment opportunities and mitigate threats. This situational awareness requires no senior permission and no complex applications or business systems. It only requires looking periodically at the available information sources (for example, industry, press, Congress, Service, OSD, Office of Management and Budget, Securities and Exchange Commission, Joint Staffs, Combat Command, and international sources) inside and outside the DoD that pertain to your project's environment. Collect the information, analyze it and move out on your conclusions. Again, don't hesitate to share what you've learned across your network. You may inspire others to look at their own environments.

Understand and use the "big waves." Add the "wave's momentum" to your own.

In the mid-1990s, the DoD was wed firmly to Weapons C3I (command, control, communications and intelligence) programs that shared several basic characteristics. They were highly integrated with huge centrally hosted, multilayer software, using equipment that complied with military specifications. The immense "sunk cost" of these programs powerfully incentivized future systems to remain based on that model—within both the DoD and the major DoD prime contractors. Unfortunately, modifying and upgrading these tightly integrated systems required a lot of time and money. Operators became very dissatisfied. At the same time, using commercial off-the-shelf (COTS) and Open Architecture (a "big environmental wave") was becoming the industry standard for telecommunications and C4I (C3I plus computers) sectors.

The Navy's submarine force decided to "depart the pattern" of high integration by using a COTS-based, federated openarchitected system (allowing the addition of "plug and play" subsystems) with controlled interfaces and a well-designed life-cycle support plan based on an assessment of COTS compliancy. This required top-level Department of Navy support, and an outreach strategy to the major C3I contractors, keeping them apprised of the Navy's intent and encouraging them to participate. The result was an extremely capable and supportable Virginia-class nuclear-powered attack submarine C3I system with huge reductions in both development costs and ship-set costs.

Identify and use the "big waves"—they can take you a long way and may be the most effective way to break a "sunk cost paradigm."

Don't take "no" for an answer until you've reached the "head guy"—the "five noes" theory. So you've come up with an innovative solution, and now you need to socialize it with key players (e.g., contracting, legal, technology and testing). You go to your contracting officer, lawyer, science and technology expert or tester and you get an unequivocal "no." Is that the end? It shouldn't be. As the acquisition workforce shifts to its "post-

boomer" configuration, it will become smaller and at least in the near term will contain less experience. Less-experienced people may provide more "black and white" answers, fewer "shades of gray." Possibilities often reside in the shades of gray, which are discerned best by folks with extensive experience across a wide variety of acquisitions. Getting to those people, who often are group leaders, may require multiple elevations of the issue to reach their level—thus "the five noes."

It's worth making those efforts, both in obtaining high-level support for an innovative effort and in "opening the aperture" for junior individuals who can then better appreciate the "breadth of opportunities."

Find the optimal path. If you understand your program's operating environment, you will know where "paths ahead" and the "obstacles to progress" are. This will allow you to develop ways to exploit the paths and avoid or mitigate the obstacles. Working with your chain of command and your network, you will gain a wider and more experienced group to help assess these obstacles and develop more ways to resolve them. In certain cases, your allies may be able to provide an opponent a different perspective on why your effort should go forward. Identifying the optimal route for your program never is wasted effort!

Listen and act on your "gut feeling"—it recognizes a problem first. "Gut feeling," "intuition," "subliminal cogitation"—call it what you will—is a powerful tool, arising from the sum of your knowledge, experience and judgment. You should use it as much as possible. It often manifests itself as an "uneasy feeling" or waking up at 3 a.m. with a concern. It may not provide an answer right away, but acting on it is the first step. Disregarding it eliminates an "early warning" that can spare you and your organization much pain. One way to address that "gut feeling" is to pull together those involved to discuss the actual situation in your area of concern.

My first commanding officer (CO) asked a key question in his qualification interviews for prospective officers of the deck (OODs)—those who would run the ship on a watch-to-watch basis: "When do you need to call me for advice or guidance?" Usually, an OOD candidate would laboriously discuss various scenarios. Eventually, the CO would hold up his hand and say: "You're making this too hard. You need to call me any time you ask yourself the question, 'Should I call the captain?' "The time to act on a "gut feeling" is when it occurs.

Keep your partners and chain of command in the loop as things happen. Avoid misunderstandings. "Stuff happens": That is a constant across all acquisition efforts. The other constant is that your chain of command eventually will know about it. Given those two constants, it is in your best interests to "disclose early" and provide planned corrections (which, hopefully, you've already begun executing). Doing so will maintain your credibility with your customers and chain of command, get your story out first and retain the leadership's confidence.



Move forward as soon as you can provide a good outcome. This takes a page from industry's book (particularly in information technology). If you are developing capability in an area of continuous growth or churn, trying to capture the "90th percentile" of capability before fielding usually is not a "best value" approach for the customer. It is better to get a good level of capability out early, as long as it meets the "know what you're delivering" mandate from Under Secretary of Defense for Acquisition, Technology, and Logistics Frank Kendall. Doing so supports early fielding and directly involves the user in product refinement. Let user inputs on the actual product guide the "good to great" progression effort.

Be a "junkyard dog" in searching for resources. Don't wait for the handout—it may not come. As the traditional sources of money shrink, leveraging everyone's favorite appropriation ("other people's money") becomes increasingly important. Sources such as the Small Business Innovative Research (SBIR) and Science and Technology (S&T) Funds can plug critical gaps in an acquirer's budget, if leveraged in accordance with the conditions for their use. SBIR comes to the program for use in program initiatives. S&T (6.2, 6.3, and 6.4) resources at Service and DoD laboratories can be leveraged by acquirers to produce needed technologies in collaboration with the laboratories that own the funds. Your organization has to do the liaison or present the proposal, but augmenting your budgets is worth that effort.

Advertise. Someone you don't know needs what you're doing. If your product could be used across Service and agency boundaries, it is worth your time to visit these potential customers and provide information (maybe even a demonstration). You'll be surprised how many people haven't heard about your "available capabilities." Advertising (writing articles for DoD or Service publications and being interviewed by trade publications) can get the word out. As defense budgets shrink, users will look for existing capabilities they need but don't have to develop. Finally, don't neglect foreign military sales for your products. The defense industry is moving strongly in this

direction, which you may find is of common value to you and your prime contractor.

Call "I don't have it!" in time to survive it. Know your limitations and those of your team. Many acquisition leaders are "Type A," take-charge, confident and aggressive personalities. Many others emulate "Type A" characteristics. While this normally provides positive energy, one particular trait—the leader's confidence that he or she can solve a problem—can itself present a problem if taken to extremes. Specifically, some problems cannot be resolved by the organization or the leader alone. A leader who does "not admit defeat" until catastrophe is imminent can prevent discovery of solutions that are available through working with outside partners or senior leadership. It's like the outfielder who waves away other team members as he races to catch the long fly ball: He is sure he has it—until he doesn't! The acquisition leader must be prepared to call the "I don't have it" point early so that external partners and senior leaders can invoke solutions at their level. This may produce disagreements within the team. But it is important to preserve the ability to find and implement solutions outside the organization's scope if its own "best efforts" fail. Your boss will not appreciate your "ownership" if it prevents him from helping you on a tough problem!

Read history. You may find your answer there. Past experiences can open doors. History is full of people facing the same types of problems or opportunities. Whether they succeeded or failed, understanding what they did and assimilating that hard-gained knowledge is worthwhile. Examples include:

- Marrying technology breakthroughs to warfighter need: Adm. Hyman Rickover and the nuclear submarine; Rear Adm. William F. Raborn and seaborne ballistic missiles; the first 50 years of military aviation.
- Recapitalizing warfighting capability: British Adm. Sir "Jacky" Fisher and the Royal Navy revolution (1904–1910); standing up the Union Army in the Civil War (1861–1865).

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 Asymmetric warfare and systems supporting it: American strategy and systems in the Revolutionary War; American naval construction (the "six frigates" program) and the War of 1812; British Adm. Lord Thomas Cochrane and asymmetric tactics (1800–1850).

The principles and the human factors are the same. Only the technologies differ. And don't just look at the "good guys" or "winners." History's "bad guys" or "losers" also provide valuable knowledge.

Processes are there to support you—not vice versa.

How can one negotiate the "land of the checkers"? If one thing has become apparent in recent years, it's that senior leadership and warfighters share an overriding interest in achieving meaningful operational outcomes. Conducting two extended wars and the recent budget reductions require us to identify better methods for meeting real needs with real capabilities. This overriding interest also has allowed us, as acquirers, to challenge and modify processes that impede these outcomes. Unfortunately, not everyone got (or accepted) the word on this change. When you encounter this, remember the "five noes": Challenge the decision or direction and go "up the chain." This is where your senior leadership can engage to excellent effect, enabling the challenge (if necessary) to get to senior OSD or Service acquisition leadership for resolution.

Find a mentor. For thousands of years, long-term mentoring has been the way to inculcate true mastery of complex professions. Progression from apprentice to journeyman to master included not only learning the professional skill sets but gaining command of the "art." This was best done over time in a personal relationship between master and aspirant. This allowed the master to provide the aspirant his experiential knowledge—the "art" that complemented the "science." This principle is as important, and as effective, as ever. Unfortunately, one does not automatically acquire a mentor. Most people must search for one. While your immediate boss might be a good choice, his or her workload may preclude performing

this role. So you may want to find a senior individual outside your chain of command. Contacting past bosses or a reference from your current boss to an acquisition leader he or she respects are good ways to obtain a mentor.

Looking Forward ...

The challenges and inherent chaos of today's DoD acquisition environment demand that we depart from "rote process execution" and adopt innovative, critical thinking. Our chaotic operational environment can help us find ways ahead if we choose to exploit it, rather than be limited by it. Acknowledging our identities as acquisition operators and adopting operational techniques (developing high-performing teams and cultivating and using situational awareness) are critical keys to delivering warfighting capability.

Doing this is within the reach of every acquirer. It may require a change in mindset, and acceptance of increased risk, but there is enormous potential for improved warfighter support and job satisfaction in being a "chaosmeister"!

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MDAP/MAIS Program Manager Changes

With the assistance of the Office of the Secretary of Defense, *Defense AT&L* magazine publishes the names of incoming and outgoing civilian and military program managers for major defense acquisition programs (MDAPs) and major automated information system (MAIS) programs. This announcement lists a recent change of leadership.

Navy/Marine Corps

Capt. Daniel M. Brintzinghoffer was assigned as program manager for the newly established Frigate (FF) Program Office, PMS 515, on Jan. 28.

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